

RECEIVED
FEB 20 1986

DIVISION OF
OIL, GAS & MINING

ANNUAL OPERATIONS AND PROGRESS REPORT

From Month/Year January 1985
to Month/Year December 1985

(To be submitted for each mining operation at the end of each calendar year to the Division at this address:)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
(801) 538-5340

OPERATOR: Interstate Brick Company MINE NAME: Fivemile Pass

ADDRESS: 9780 South 5200 West
West Jordan, UT 84084

PERMIT NUMBER AND DATE OF PERMIT: ACT/045/006 Not yet approved

REPRESENTATIVE: Ronald H. Baldwin

SECTION(S): 32; 4, 5 TOWNSHIP(S): 6; 7 South RANGE(S): 3 West SLBM

MINERAL(S) MINED: clay

STATE AND/OR FEDERAL MINERAL LEASE NUMBERS: State Mineral Lease Number 28072

SPECIAL USE PERMITS AND/OR RIGHTS-OF-WAY: None

Section 40-8-15 and Rule M-8 of the Utah Mined Land Reclamation Act, requires each operator to include with this report an up-dated map and plan prepared in accordance with Rule M-3, as outlined in the requirements for annual report maps in Appendix I, providing a detailed status of all mining and reclamation activities which have occurred during the past year.

The report should include:

MINING:

(a) Tabulation of acreage disturbed (by pits, roads, facilities, etc.) during the report period with illustration on a current map.

<u>Disturbance</u>	<u>Acreage</u>	
Pit	<u>0</u>	Previously shot rock was stripped from within pit 3d and spoiled in either pit 3c or back into pit 3d. No new ground was disturbed.
Roads	<u>0</u>	
Facilities	<u>0</u>	
Waste Dumps	<u>0</u>	
Other	<u>0</u>	

(b) Tabulation of acreage affected to date (by years).

<u>Date by Year</u>	<u>Acreage (Total)</u>
1975 1977	<u>38</u>
1976 1978	<u>40</u>
1977 1979	<u>40</u>
1978 1980	<u>40</u>
1979 1981	<u>43</u>
1980 1982	<u>43</u>
1981 1983	<u>43</u>
1982 1984	<u>45</u>
1983 1985	<u>45</u>

20.4 acres predate the act

(c) Tabulation of all topsoil (new) stockpile volumes (see chart below) and date of stockpiling.

SOIL TABULATION CHART

Area Affected (in mining sequence) (If more space is needed, please attach.)	Area			
	1	2	3	etc.
Acreage of Area	<u>No topsoil was disturbed</u>			
Depth of Topsoil Removal (inches)	<u></u>			
Depth of Topsoil Replacement (inches)*	<u></u>			
Estimate of Topsoil Volume Salvaged (yd ³ or ac ft)	<u></u>			
Volume Actually Salvaged (yd ³ or ac ft)	<u></u>			
Volume Required for Reclamation (yd ³ or ac ft)	<u></u>			
Surplus or Deficit Volume (yd ³ or ac ft)	<u></u>			
Storage Status (short- or long-term)	<u></u>			

Soil Tabulation Chart (continued)

Area Affected (in mining sequence)	Area			
	1	2	3	etc.
Storage Location	N/A			
Area Where Soil Has Been Used (if not stored)	N/A			
Running Total (all stockpiles) (yd ³ or ac ft)	11,500 y ³			
Short-term	0			
Long-term topsoil substitute material	11,500 y ³			

*Of previously stripped area recently reclaimed.

(d) Tabulation of all (newly removed) out-of-pit spoil volumes, date of placement and illustration on a map.

<u>Area</u>	<u>Date</u>	<u>Acreage</u>
<u>All spoil was either placed in pit 3e or back into pit 3d. Work took place from September 9 - October 26, 1985. No additional acreage disturbed.</u>		

(e) Tabulation of quantity of commodity mined.

	<u>Commodity</u>	<u>Tonnage</u>
(Mined)	Clay (pit 3a)	30,000
(Milled) (Hauled)	Clay	18,000

(f) Description of any new construction during the report period with illustration on a map, including, but not limited to:

1. Buildings and support facilities.

None

2. Roads.

None

3. Diversion ditches, collector ditches, interceptor ditches, etc.

None

4. Culverts.

None

5. Sediment ponds, containment ponds.

None

6. Monitoring sites (vegetative, air quality, surface subsidence, surface water or ground water, etc.).

None

7. Topsoil stockpiles.

None

(g) Description of any environmental problem areas with a proposed plan for mitigation and illustration on a map, including, but not limited to:

1. Pit stability problems.

None

2. Subsidence.

None

3. Accidental water discharge, dam failure, etc.

None

4. Slumping, sliding or erosion.

None

5. Revegetation problem areas.

None

6. Existence and location of unsuitable (toxic) overburden.

None

RECLAMATION:

(a) Tabulation of the acreage reclaimed during the report period with illustration on a map, distinguishing between:

1. Backfilled, graded and contoured areas.

	<u>Area</u>	<u>Acreage</u>
<u>Backfilled:</u>	3e and north corner of 3d	
<u>Graded:</u>	None	
<u>Contoured:</u>	None	

2. Topsoiled areas.

	<u>Area</u>	<u>Acreage</u>
	None	

3. Seeded areas.

<u>Area</u>	<u>Acreage</u>
None	

4. Reseeded areas (areas previously seeded, then seeded again).

<u>Area</u>	<u>Acreage</u>
None	

(b) Tabulation of total acreage reclaimed (seeded with permanent seed mix) to date by years with illustration on an updated map:

<u>Year</u>	<u>Acreage</u>
1975 1976	0
1976 1977	0
1977 1978	0
1978 1979	0
1979 1980	0
1980 1981	0
1981 1982	0
1982 1983	0
1983 1984	0
1984 1985	0

(c) Description of the reclamation procedures used during the report period, including:

1. Average depth of topsoil applied.

N/A

2. Type of seed (species) used for seeding during the report period.

N/A

3. Date of seeding during the report period.

Spring N/A

Fall

4. Seeding procedures used.

(Hand broadcast or drilled or any other).

N/A

5. Rate of seed application.

Pounds Per Acre of Pure Live Seed (PLS) (if varied, please explain)

N/A

6. Type and rate of fertilizer applied.

N/A

7. Type and rate of mulch applied.

N/A

8. Rate of irrigation water applied, if any. Please describe any type of sprinkling, or water applied (water truck, etc.).

N/A

9. Revegetation test plot information.

(Cover, density, productivity, etc.)

N/A

10. Soil analysis results.

Soil analyses were made as part of efforts connected
with filing a new MR-1 form. A copy of the soil analyses
is enclosed.

(d) Description of results of previous revegetation efforts, including:
(This should be done as applicable.)

1. Types (species) of seed that have germinated and are growing.

None

2. Types (species) of seed that are not growing successfully.

None

3. Areas experiencing problems with weeds and weed types.

None

4. Significant erosional problems.

None

5. Areas of unsuitable overburden on the surface as related to
revegetation failure.

None

6. Procedures used or proposed to correct these problems.

N/A

7. Acreage and dates of release (upon inspection by the State) of revegetated areas.

<u>Area</u>	<u>Date</u>	<u>Acreage</u>
None		

8. Results of soil analysis.

See #C-10.

(e) Summarization of the reclamation costs incurred during the report period, including itemized costs for each operation (i.e., grading, topsoil replacement, seeding, etc.) and for each type of disturbance (i.e., spoil, haul roads, facilities removal, etc.) on a per acre basis.

	<u>Acres</u>	<u>Cost/Acre</u>	
1. Grading			
2. Backfilling	1	30,000	This acre has not been finished & additional backfilling will occur
3. Contouring			
4. Topsoil Replacement			
5. Seeding			
A. Seedbed Preparation			
B. Mulch			
C. Fertilizer			
D. Seed			
6. Other			

BOND INFORMATION:

- A. An updated bond estimate should be included, if required in the Division's approval of the Mining and Reclamation Plan (MRP) or if changes to the MRP have occurred, including a detailed itemization of actual/estimated reclamation costs as outlined in the RECLAMATION section above. The date of the release of revegetated areas from further responsibility for a partial bond release, if applicable, should also be included.

	<u>Amount</u>	<u>Type</u>	<u>Date Posted</u>
Present Bond	None		

Increased disturbance, if any:

None

Increased Bond Amount (attached reclamation estimate).

B. Bond release.

<u>Acres</u>	<u>Bond Amount Released</u>	<u>Date</u>
<u> </u>	<u>None</u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>

ADDITIONAL INFORMATION:

Supply any additional information as requested by the Division related to:

- (a) Permit stipulations (status).
- (b) Other special conditions (status).

A new Mr-1 form was filed with the Division on this mine in 1985. The Division responded in December of the same year and listed their concerns. We will respond to those concerns in 1986 and will hopefully obtain an approved permit.

Interstate Brick
September 5, 1985

NPI Soil Testing/Plant Tissue Analysis Laboratory
417 Wakara Way
Salt Lake City, UT 84108
(801) 582-0144, Ext. 371, Von Isaman

Name	% OM	Sat. %	pH	EC mmhos/cm	NO ₃ -N ppm	P ppm	K ppm	% Sand	% Silt	% Clay	Textural Class	Ca ppm	Mg ppm	Na ppm	SAR ppm	CEC meq/100g
1. Five Mile Bank Fill Topsoil Substitute	.25	30	8.02	11.66	80	3	78	56	27	17	Sandy Loam	532	496	4044	30	14.5
2. Five Mile Topsoil	1.95	33	8.21	0.28	8	3	226	48	31	21	Loam	49	12	8	0.3	23.6
3. Jim Gay, Dump Material Topsoil Substitute	.49	38	8.48	0.52	6	2	129	56	23	21	Sandy Clay Loam	28	11	111	5	15.0
4. Jim Gay, South Bank Hill Topsoil Substitute	.43	31	8.20	5.50	7	2	173	54	29	17	Sandy Loam	163	257	1705	23	13.8
5. Powell Bank Fill Topsoil Substitute	.55	34	8.17	1.24	4	1	209	42	39	19	Loam	84	50	164	4	16.5
6. Powell Topsoil	2.55	39	8.01	0.41	10	5	175	58	19	23	Sandy Clay Loam	75	16	13	0.4	27.5

Five Mile Bank Fill Topsoil Substitute: This Soil is rated: saline-sodic soil. Based on the criteria to establish suitability of topsoil or topsoil substitutes, we do not recommend this soil as a plant growing medium. Therefore, no fertilization recommendations are made. Exchangeable-sodium-percentage (ESP) is 30.5.

Five Mile Topsoil: This soil is rated: Non-saline soil. Nutrient rating: (N) Nitrogen: 3/8 (P) Phosphorus: 1/3 (K) Potassium: 2/2 Fertilizer recommendation: 55 lbs N/acre, 17 lbs P/acre, No additional K required. A sulfur base fertilizer (as ammonium phosphate sulfate) would help lower pH.

Jim Gay, Dump Material: This soil is rated: Non-saline soil. Nutrient rating: (N) Nitrogen: 2/8 (P) Phosphorus: 1/3 (K) Potassium: 2/2 Fertilizer recommendation: 75 lbs N/acre, 17 lbs P/acre, No additional K is required. A sulfur based fertilizer (as ammonium phosphate sulfate) would help lower pH.

Jim Gay, South Bank: Same as Five Mile Bank Fill Topsoil Substitute except (ESP) is 25.0. However, gypsum may be added to remedy the high sodium condition. Powell Bankfill: This soils is rated: Non-saline soil. Nutrient rating: (N) Nitrogen 2/8 (P) Phosphorus 1/3 (K) Potassium 2/2 Fertilizer recommendation: 75 lbs N/acre, 17 lbs P/acre, no additional K is required. A sulfur base fertilizer (as ammonium phosphate sulfate) would help lower pH.

Powell Topsoil: This soil is rated: Non-saline. Nutrient rating: (N) Nitrogen 4/8 (P) Phosphorus 2/3 (K) Potassium 2/2 Fertilizer recommendation: 25 lbs N/acre, 9 lbs P/acre, no additional K is required. A sulfur base fertilizer (as ammonium phosphate sulfate) would help lower pH.